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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,482	11/07/2001	Kenneth L. Davis	31008.P033	7199

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EXAMINER	
HARTMAN JR, RONALD D	

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,482	DAVIS, KENNETH L.	
	Examiner	Art Unit	
	Ronald D Hartman Jr.	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) *11,12,14,30,31,33,49,50,52 and 64-72* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5,20,21,24,39,40,43 and 58-63* is/are rejected.

7)☒ Claim(s) *3,4,8,9,22,23,27,28,41,42,46 and 47* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-5,8,9,11,12,14,20-24,27,28,30,31,33,39-43,46,47,49,50,52 and 58-72.

DETAILED ACTION

1. Claims 1-5, 8-9, 11-12, 14, 20-24, 27-28, 30-31, 33, 39-43, 46-47, 49-50, 52 and 58-72 are presented for further examination, of which claims 11-12, 14, 30-31, 33, 49-50, 52 and 64-72 are withdrawn from further consideration as they are directed toward a non-elected group of claims. See the Restriction Requirement outlined below in this office action as well as the Examiner's Amendment below.

2. On 3/31/2005, a courtesy call was placed to Brenda Binder, an attorney of record of the instant application, to inform the applicant that a Restriction Requirement would be necessary due to newly filed claims. The newly filed claims do not require the same functionality as the previously filed claims, and therefore Restriction for examination purposes seems appropriate. This is further explained below. It is noted that the applicant chose group I, without traverse, consisting of claims 1-5, 8-9, 20-24, 27-28, 39-43, 46-47 and 58-63. Therefore, claims 11-12, 14, 30-31, 33, 49-50, 52 and 64-72 are withdrawn from further consideration as they are directed towards a non-elected invention.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-5, 8-9, 20-24, 27-28, 39-43, 46-47 and 58-63, drawn to a computer implemented method for determining a design schedule for designing an object associated with a CAD model, classified in class 700, subclass 100; and

   II. Claims 11-12, 14, 30-31, 33, 49-50, 52 and 64-72, drawn to a computer implemented method for determining the amount of time to complete the design of an object associated with a CAD model, classified in class 700, subclass 97.

4. The inventions are distinct, each from each other because of the following reasons: Inventions I and II are related as sub combinations disclosed as usable together in a single combination. The sub combinations are distinct from each other if they are shown to be separately usable. In the instant case, Invention I has separate utility such as in a system lacking the requirement of determining a user skill level, as well as in a system lacking the determination of the amount of time to complete the design of an object associated with the CAD model, in addition to a step of comparing an estimated time with an actual time. Invention II has separate utility such as in a system lacking the utilization of a complexity value for facilitating the determination of a design schedule for designing an object associated with the CAD model. See MPEP 806.05(d).

5. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, and vice versa, restriction for examination purposes as indicated is proper.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 5, 20, 24, 39, 43 and 58-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuzaki et al., U.S. Patent No. 5,357,439.

As per claims 1, 20 and 39, Matsuzaki et al. teaches a computer implemented method comprising:

- accessing computer aided design (CAD) model information and determining a complexity value for the CAD model (e.g. Figures 38A – 38D; "difficulty values"); and

- determining a design schedule, using the computer, for designing the CAD model based on the complexity value (e.g. C2 L59 – C3 L25 and Figure 1 element 3).

As per claims 5, 24 and 43, Matsuzaki et al. sufficiently teaches the use of part types and operations associated with CAD models (e.g. Figure 40 and Figure 17 element 1-13).

As per claims 58-63, Matsuzaki et al. sufficiently teaches the complexity value (e.g. difficulty value) being representative of the complexity of designing the CAD model, and that the complexity values are derived from previously designed CAD model information (e.g. database; Figure 4).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 2, 21 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki et al., in view of an obvious capability of the disclosed CAD system.

That is, although Matsuzaki et al. does not specifically teach an updating of the design schedule occurring due to a change in the CAD model, it is a feature that the system of Matsuzaki et al. obviously possesses the capability of performing since Matsuzaki et al teaches that when a change in direction is made, the difficulty is updated (e.g. C), and therefore, since the difficulty is obviously a contributor to the overall time or steps necessary for making the item represented by the CAD model, the design schedule would obviously be updated to reflect the changes made to the CAD model so that the item designed is scheduled in a manner that allows for the item to be

made in an efficient but timely manner, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

Allowable Subject Matter

10. Claims 3-4, 8, 22-23, 27, 41-42 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As per claims 3, 22 and 41, the prior art of record fails to teach a computer implemented method for designing an item represented by a CAD model, wherein a user identifier is received, and this user identifier is associated with a user log, wherein the user log determines a user level value, and wherein the design schedule is determined based upon the user level value and a complexity value, in combination with the other claimed features.

As per claims 4, 23 and 42, the prior art of record fails to teach a computer implemented method for designing an item represented by a CAD model, wherein a user log is received which determines a user level value, and wherein the design schedule is determined based upon the user level value and a complexity value, in combination with the other claimed features.

As per claims 8, 27 and 46, the prior art of record fails to teach a computer implemented method for designing an item represented by a CAD model, wherein a design schedule is further based on a user skill level that indicates the skill level of the user to design a CAD model, in combination with the other claimed features.

Claims 9, 28 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As per claims 9, 28 and 47, the prior art of record fails to teach a computer implemented method for designing an item represented by a CAD model, wherein a estimated time to design a part is determined and then compared with an actual time to design the part and if the time differs by more than a threshold value, the design

schedule is then further based on the actual time, in combination with the other claimed features or limitations as claimed.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D Hartman Jr. whose telephone number is (571) 272 - 3684. The examiner can normally be reached on Mon. - Fri., 11:30 am - 8:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached at (571) 272 - 3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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